

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Stephenson et al.	§	Examiner: Michael J. Feely
	§	
Serial No.: 10/824,217	§	Group Art Unit: 1796
	§	
Filed: April 14, 2004	§	
	§	
Title: Porous Particulate Materials	§	Attorney Docket No. 020569-03403
	§	(P202-1230B-US)
	§	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO FINAL OFFICE ACTION OF 14 JULY 2008

Sir:

This communication is in response to the FINAL Office Action of 14 July 2008.

REMARKS

Claims in the Application. Claims 106-110, 112, 114-116, 119, 121-131, 135-140, 142, 144-145, 150-154 and 160-180 are active in this application. Reconsideration is respectfully requested.

Examiner's Rejection Over Rickards. The Examiner has made the following rejections:

- (i.) rejection of Claims 106-110, 112, 114-116, 119, 121-131, 135-140, 142, 144, 145, 150-154, 160, and 169-180 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent Publication No. 6,059,034 ("*Rickards*"); and
- (ii.) rejection of Claims 161-168 under 35 U.S.C. § 103(a) as being unpatentable over *Rickards*.

These grounds of rejection are respectfully traversed.

The claims of Applicants are directed to a *particulate* which has been treated, modified or coated, not to an *agglomerate* of particulates. It is the agglomerate of *Rickards* which exhibits porosity, not a particulate.

The interconnected porosity of the particulate of Applicants permits encapsulation or entrapment of air or lightweight fluid in the pores of the particulate material. FIG. 30 of

Rickards is directed to a multi-component particle 300 composed of substantially deformable materials 304 and substantially non-deformable materials 302. As noted in col. 7, ll. 30-35 of *Rickards*, the deformable materials “cushion” the non-deformable or proppant materials and thereby prevent grain to grain contact of the non-deformable materials. Thus, FIG. 30 relates to a core of ceramic non-deformable materials which are surrounded by the substantially deformable material. *Rickards* does not disclose the use of a porous particulate, much less a particulate which exhibits inherent or induced porosity. “Porosity” in *Rickards* (e.g., col. 7, l. 38; col. 8, l. 12; col. 17, l. 27; and col. 18, ll. 34-35) relates to porosity of the pack, i.e., the porosity of the agglomerate, not to the porosity of the materials which compose the agglomerate. The referenced porosity in the claims of Applicants is to the porosity of the *particulate*.

Independent Claims 106, 161, 169 and 180 of Applicants recite a selectively configured porous *particulate* wherein the apparent specific gravity (ASG) of the selectively configured porous *particulate* material is less than the ASG of the porous *particulate* material. In light of the inherent or induced porosity of the porous *particulate*, fluids are capable of at least partially moving through interconnected pore spaces of the porous particulate. The claimed ASG limitation of Applicants is not met by the agglomerate of *Rickards* because the deformable materials in *Rickards* fill the porous spaces *in between* the hard non-deformable materials.

Further, Claim 137 of Applicants is directed to a porous particulate material having inherent or induced permeability which is treated or modified with a *glazing material*. As stated *supra*, *Rickards* does not disclose a porous particulate. Neither does *Rickards* reference a material which is treated or modified with a glazing material.

Examiner's Rejection on the Ground of Double Patenting. The Examiner has rejected Claims 106-110, 112, 114-116, 119, 121-131, 135-140, 142, 144, 145, 150-154 and 160-180 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 95-97 of *Rickards*. This ground of rejection is also traversed.

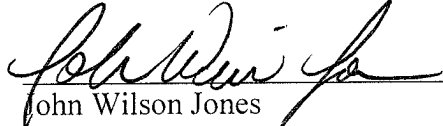
Claims 95-97 of *Rickards* specifically recite a blend of deformable particulates and non-deformable particulates. The resultant is an agglomerated pack. The deformable particulates of *Rickards* are not proppant. The proppant in *Rickards* is the substantially non-deformable material. The combination of deformable particulate and substantially non-deformable material would not exhibit the claimed physical properties of the particulate claimed by Applicants, as discussed *supra*. There is no reason to conclude that the “patented claims with components . . .

would have inherently or obviously satisfied the instant invention.” (Paragraph 6 of Office Action.) Reconsideration of the rejection is therefore respectfully requested.

Conclusions. The Examiner is respectfully requested to telephone the undersigned should he deem it useful to expedite the prosecution of this application and issuance of a Notice of Allowance.

Respectfully submitted,

Dated: October 14, 2008


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